

# LT3BC200300-IR850 | DATASHEET

# High-power LED backlights with integrated driver











#### **SPECIFICATIONS**

### **Lighting specifications**

Illumination area height	(mm)	200
Illumination area width	(mm)	300
Number of LEDs		864
Light color, peak wavelength		IR, 850 nm
Spectral FWHM	(nm)	35
Illuminance, continuos <sup>1</sup>	(klux)	0.01
Irradiance, continuos <sup>1</sup>	(W/m <sup>2</sup> )	73
Illuminance, boosted <sup>1</sup>	(klux)	0.03
Irradiance, boosted <sup>1</sup>	(W/m <sup>2</sup> )	154
Illuminance, strobe <sup>1</sup>	(klux)	0.06
Irradiance, strobe <sup>1</sup>	(W/m <sup>2</sup> )	335
Diffuser		yes
Collimation film		optional

# **Mechanical specifications**

Height	(mm)	208.0
Width	(mm)	326.0
Thickness	(mm)	24.0
Mass	(g)	1222
Clamping system		4x M4 threaded holes
Environment		
Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85, non condensing
Installation		Indoor use only
IP rating		IP54

#### **KEY ADVANTAGES**

#### **High-power light output**

**Built-in driver** for continuous and strobe operations

# **Industry standard 5 PIN M12 Connector**

with PNP/NPN/analog dimming input

Optional collimating, polarizing and protective filters
Compact & robust design with reduced thickness (24 mm) and thin edges

Automatic shutdown in case of overheating

**The LT3BC series** features high-performance LED backlights designed to provide high-power light output, excellent uniformity and contrast thanks to high-efficiency LEDs.

#### **Electrical specifications**

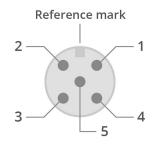
Liectifical specifications		
Operating mode		Continuous and strobe
Supply voltage	(V)	24
Current, continuos	(mA)	1920
Power consumption, continuos	(W)	46.1
Current, boosted	(mA)	3840
Power consumption, boosted	(W)	92.2
Pear current, strobe	(mA)	7680
Peak power consumption, strobe	(W)	184
Min pulse duration	(μs)	3
Max pulse duration	(ms)	10
Max duty cycle	(%)	10
Typical pulse delay	(ns)	300
Typical jitter	(ns)	10
		PNP logic input,
I/O interface		NPN dimming input ,
		analog dimming input
Connector		M12 straight plug
COMMECTOR		male connector
Included cable		2x 20 cm pigtail
Eye safety		
Risk group (CEI EN 62471:2010)		Risk group 1

Risk group (CEI EN 62471:2010) Risk group 1

<sup>&</sup>lt;sup>1</sup> At emitting surface.



## **CONNECTOR PINOUT**



Device side

700

Pin	Function
1	+24Vdc
2	NPN
3	GND
4	PNP
5	Analogue dimming (0-10V)

# 

800

850

Wavelength [nm]

900

950

750

**LED** color spectrum

# **COMPATIBLE PRODUCTS**

Full list of compatible products available here.



A wide selection of innovative machine vision components.